

United States Department of the Interior Bureau of Land Management



Salt Lake Field Office

2007 Aviation Plan

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1.0 PURPOSE / AUTHORITY / RESPONSIBILITIES

1.1 Purpose

This plan sets forth policy, procedures and guidance to implement the Aviation Management Program for the BLM, Salt Lake Field Office (SLFO). The purpose is to clarify and standardize aviation management procedures and operations for all employees in the SLFO.

1.2 Mission Statement

The SLFO Aviation Program provides safe and efficient aviation services to meet land management objectives. Utilization of technology, sound aviation management practices and highly trained/motivated personnel will reduce risk, loss, waste and expenditures.

1.3 Authority

The authority for the Aviation Management Program derives from 43 U.S.C. 2 and 1201 for the Secretary of the Interior, and annual appropriation acts for specific authorizations. This plan is a supplement to the <u>BLM 9400 Manual</u> and the <u>Utah State BLM Aviation Management Plan</u>. As such, it conforms to all Bureau and Departmental aviation policy.

1.4 Responsibility

- **A.** Dept of Interior Aviation Management (AM) is responsible for all Department of Interior (DOI) aviation policy and performs aircraft contracting, technical inspections, procurement and payment administration. Provides Contracting Officers, Technical Specialists, Training Specialists and financial reports and services to DOI agencies.
- **B.** <u>BLM National Aviation Office (NAO)</u> is responsible for aviation policy and leadership of the BLM Aviation Program.
- **C.** <u>State Director</u> is responsible for all BLM aviation activities in Utah. This responsibility is delegated to the State FMO to the State Aviation Manager.
- D. State Aviation Manager (SAM) serves as the focal point for BLM aviation management matters in Utah, and is responsible for providing staff support and expertise to the State Director on all aviation issues. Provides expertise and oversight to all Field Office aviation operations, personnel and facilities. Develops and implements statewide Aviation Management Plan and aircraft safety and accident prevention measures. Serves as Contracting Officer's Representative (COR) on all BLM aircraft contracts in the state. Provides aviation training support to USO, Field Offices and other agencies. Compiles annual statewide Aviation Statistical Summary. Provides reports and support to National Aviation Office projects and initiatives. Serves as the focal point in airspace coordination issues. Coordinates airspace training, briefings and familiarization for dispatchers, aircrews

- and Air Traffic Control (ATC) personnel in Department of Defense (DOD), Federal Aviation Administration (FAA) and land management agencies. Responsible for coordination and resolution of airspace conflicts involving fire, other incident, and project aviation operations.
- **E.** Field Office Manager. Each Field Office Manager has been delegated the responsibility from the State Director for aviation management and operations within their jurisdiction. Ensures all supervisors of aviation users attend the DOI-AM Aviation Management for Supervisors (M-3) training. A complete list and DOI interpretation of the Field Office Manager's responsibilities can be found in 350 DM 1, Appendix. 3C.
- F. Unit Aviation Manager (UAM). The Fire Management Officer (FMO) has been delegated the authority and responsibility from the Field Office Manager as the Unit Aviation Manager for the Salt Lake Field Office. The UAM is responsible for ensuring aviation operations in their jurisdiction comply with DOI and Bureau policy and regulations. Manages the aviation management program to meet field office program objectives. The UAM develops assigned personnel to meet local aviation position requirements through training and experience. Maintains aviation training and qualifications records and ensures all DOI training requirements are met by field office personnel that utilize aviation resources. The UAM is also responsible for developing, updating, and implementing a field office Aviation Plan and may serve as Project Inspector (PI) on aviation contracts. The UAM serves as the local focal point in airspace coordination issues and coordinates airspace training, briefings, and familiarization for dispatchers, aircrews, and ATC personnel in DOD, FAA and land management agencies within their area. The UAM is responsible for coordination and resolution of airspace conflicts involving fire, other incident, and project aviation operations.
- G. Aircraft Dispatchers. Fire Center personnel normally fulfill aircraft dispatching duties for several agencies at the Northern Utah Interagency Fire Center (NUIFC) under the direction of the NUIFC Center Manager. Dispatch is responsible for ordering contract and CWN aircraft, or procuring rental (ARA) aircraft for local administrative, fire, and resource flights, ensuring that DOI/BLM/OMB requirements are met. NUIFC dispatches aircraft, provides and documents flight following, performs cost analyses, provides for airspace coordination and deconfliction, and initiates emergency/SAR procedures when necessary; maintains documentation files on each flight, local aviation vendors, radio logs, etc; assists project flight managers and aviation managers in completing Project Aviation Safety Plans for project flights; and develops and updates the Interagency Aviation Mishap Response Plan at least semi-annually and the Local Area Aerial Hazard Map annually.
- **H.** Pilot. The pilot is in command of the aircraft at all times and is responsible for the safety of her/him and all passengers. Provides safety briefings to passengers and files flight plans with FAA or agency. Completes load calculations or weight and balance computations prior to flight. Must abide by FAA/DOI requirements specified in the contract or ARA.

- Completes flight invoices for services rendered. The pilot may terminate a flight at any time for safety reasons.
- I. <u>Aircraft Managers</u>, including Helicopter and Single Engine Air Tanker (SEAT) Managers, are responsible for planning, coordinating, and supervising aircraft operations according to DOI/BLM policy. A manager serves as the Project Inspector to administer exclusive use, CWN, or ARA aviation contracts in the field. Directs pilot and crews, conducts risk and hazard analysis, and completes flight invoices, daily diaries and other documentation. Provides briefings to aircrews, project leaders, passengers, and the public. Ensures operations are compliant with established DOI and Bureau policies.
- **J.** Flight Manager. The Flight Manager (formerly called "Aircraft Chief-of-Party") is a government employee designated for a given flight or project to provide aviation management. He/she must have received approved Flight Manager training and the five required IAT modules, equivalent to B-3 Basic Airplane and Helicopter Safety (per OPM 07-04 and the BLM National Aviation Plan), within the last 3 years. Duties include but are not limited to; inspects pilot certification card and aircraft data card for currency and qualifications; briefs pilot and passengers on mission; ensures pilot gives safety briefing and flight is conducted within DOI/BLM policy; initials flight invoices and routes according to local office procedures. Government Pilots may serve as Flight Managers.
- **K.** <u>Aircrew Members</u>. Aircrew members perform an active mission function during the flight and as such are not considered to be passengers. Aircrew members include, but are not limited to, designated observers, spotters, Air Tactical Group Supervisors, smokejumpers, helitack crew, loadmasters, etc. The minimum training requirements (five IAT modules equivalent to B-3) for Aircrew Members are outlined in <u>OPM 07-04</u> and in the <u>BLM National Aviation Plan, Chapter 4</u>.
- **L.** Passengers. Travel on BLM owned or procured/contracted aircraft is restricted to official travel. All passengers will be approved on the flight plan. Passengers, as defined in OPM 07-04, are those who are transported on Point-to-Point flights, and do not perform an active role during special use mission flights. There are no specific training requirements for passengers other than receiving a pre-flight briefing from the pilot in command.
 - (1) Official Passengers. The following are official passengers as defined by 350 DM 1.7A:
 - (a) Officers and employees of the Federal Government traveling on official business.
 - **(b)** Members of Congress and employees of Congressional committee staffs whose work relates to DOI programs.
 - (c) Non-Federal passengers when engaged in activities which enhance accomplishment of a DOI program such as personnel of cooperating state, county or local agencies; representatives of foreign governments; contractors' representatives to include those employed by such agencies; and private citizens.

- (2) <u>Unauthorized Passengers</u>. All personnel who are not official passengers shall be considered an unauthorized passenger. Unauthorized passengers will not be transported in any BLM aircraft. For further definitions, see <u>350 DM 1</u>.7B. An official passenger could become an unauthorized passenger by performing a function he/she is not authorized.
- M. <u>Volunteers</u>. Volunteers, when traveling on official business, are official passengers within terms of 350 DM 1.7A. They must have the applicable aviation safety training. Volunteers are not permitted to operate or serve as an aircrew member on any DOI aircraft; be on board a BLM aircraft during any special use mission (i.e. we cannot fly a volunteer on any helicopter flight in the BLM); be reimbursed for the operation of personal aircraft while on official business; and they will not transport any BLM employee, on official business, in a personal aircraft.

1.5 References

- **A.** Title 14 CFR (Federal Aviation Regulations)
- **B.** Departmental Manual, Parts <u>112</u>, <u>350-354</u>
- C. Aviation Management Operational Procedures Memoranda (OPM's)
- **D.** Aviation Management Handbooks and Reference Guides
- E. BLM Manual Sections 1112, 1221, 1243, 1244, 1525, 9111, 9210, 9400
- F. Office of Management and Budget (OMB) Circulars A-76, A-123, A-126
- **G.** GSA Federal Property Management Regulation (FPMR) 101-37
- **H.** Interagency Aviation Operational Guides (<u>IHOG</u>, <u>IAIG</u>, <u>ILOG</u>, <u>IATBOG</u>, Standards for Fire and Aviation Operations [the "<u>Red Book</u>"] etc.)
- I. BLM Volunteer Manual

2.0 GENERAL POLICY

- **2.1** The highest priority in any aviation activity will be personal safety. SLFO's philosophy is risk reduction, pro-active mitigating controls, and accident prevention.
- **2.2** SLFO personnel performing aviation functions shall meet all qualification requirements of DOI DM 350-354 and recognized BLM standards. Aviation personnel will be service oriented, exhibiting professionalism and integrity.
- **2.3** Individual development, employee wellness, and Workforce Diversity will be emphasized at all levels of the SLFO Aviation Program.
- **2.4** The aviation organization will be developed and maintained to the most efficient level, commensurate with SLFO BLM aviation use.
- **2.5** Management has the responsibility and opportunity to enhance the aviation program through efficient aircraft utilization. SLFO is empowered to accomplish aviation missions without undue restriction, regulation, or oversight.
- **2.6** Aviation Plans at the field office level may occasionally implement policies and local procedures that are more restrictive than national policy.

3.0 AIRCRAFT REQUESTS, PROCUREMENT, AND BILLING

All acquisition and use of DOI-AM and cooperator procured aircraft will be accomplished by designated and qualified Aviation Managers (Field Office or State level) and/or by qualified Aircraft Dispatchers. This includes exclusive-use contracts, call-whenneeded contracts, On-Call (WH&B) contracts, Aircraft Rental Agreements, and use of approved cooperator aircraft.

3.1 General Aviation

Flights on scheduled commercial airlines are initiated with the contract travel service. All <u>non-airline</u>/scheduled commercial aircraft acquisition and procurement will be accomplished by designated and qualified Aviation Managers, Logistics Coordinators and Aircraft Dispatchers.

3.2 Aircraft Contracts

Aircraft services identified in the AWP to be accomplished within a specified time frame and in excess of \$25,000 require a formal aviation contract. Requests for contract services and submission of OAS-13 and OAS-13A (Airplane) or OAS-13H (Helicopter) are made to the State Aviation Manager. These requests will be reviewed and approved by the BLM national office. AMD will solicit and award the contract and assign a Contracting Officer (CO) and Technical Representative (COTR). The SAM will serve as the Contracting Officer's Representative (COR) and delegate the field administration of the contract to one or more Project Inspectors (PI).

3.3 Aircraft Rental Agreements

These agreements are utilized administrative flights, aviation projects, etc., when the dates and amount of use and funding are uncertain to the Bureau. Aircraft are ordered for specific projects as they arise and when funding exists. There is no exclusive use period and use is subject to vendor availability. Requests for ARA aircraft are made to the UAM, or a qualified Aircraft Dispatcher, only after airline services, contract aircraft and ground transportation have been determined to be unavailable or unfeasible. The cost of any aviation services procured under the ARA **may not exceed \$25,000** except during unusual emergencies, and only by special approval by a DOI-AM Area Office, Flight Coordination Specialist. All DOI use of Forest Service Procured Flight Services will be in accordance with OPM 07-39.

3.4 Cooperator Aircraft

Use of state/local government, military or other federal agency aircraft and pilots by BLM employees requires prior approval by DOI-AM. Proposed flights on these aircraft must be requested as described below in Sec. 3.7 & 4.6.

Consultation with the SLFO Aviation Manager is mandatory.

3.5 DOI-AM National On-Call Contracts

Mission-specific "On-Call" solicitations are written, awarded, and utilized by DOI-AM for specific Bureau resource management missions, upon request of the BLM National Aviation Office. One such contract currently in use is the National On-Call Wild Horse and Burro contract which is utilized in lieu of the Aircraft Rental Agreement for specialized WH&B census and capture missions. Aircraft may not be procured under these types of contracts for missions other than those for which that contract is specifically designed. Procurement and use of aircraft under this contract must currently be processed through the Utah State Office in addition to being coordinated through the SLFO Aviation Manager.

3.6 End-Product & Service Contracts

These contracts specify a product or service to be accomplished (miles of fence constructed, acres treated, horses captured, etc.) and the contractor is compensated for units accomplished. These contracts are written by BLM Contracting Officers at the Field Office, State Office or National Business Center (Denver). Although these are not Aviation agreements, aircraft may be utilized to fulfill the contract. When aircraft are utilized for projects under an End-Product contract, DOI and Bureau Aviation policies and "operational control" measures (such as requiring a flight plan, flight following, PPE, etc.) do NOT apply. For additional clarification of whether a specific aviation activity meets the criteria for being End-Product vs. requiring full operational control, refer to OPM 07-35.

The SLFO Aviation Manager and/or State Aviation Manager should be consulted whenever an aviation End-Product contract is being contemplated or written. End-Product flight activities must be monitored to ensure that Bureau employees are imposing "zero operational control" per OPM 07-35. There is absolutely no flexibility in this area due to the extreme national significance and liability associated with the concept of imposing operational control.

3.7 Flight Requests

Any request for other than scheduled commercial/airline flight requires the initiation and submission of the <u>Aircraft Flight Request/Schedule</u>, 9400-1a. The requestor supplies information concerning purpose of flight, type of aircraft needed, passenger names, dates and times of flight, management code, etc. Except for law enforcement or emergency flights, each request should be approved by one level above the requestor, and should be submitted to the local Aviation Manager/Dispatcher at least 4 weeks prior to the flight. The aviation staff will select appropriate make and model for the mission from the AM Source List, or other agency-approved aircraft, and complete the <u>9400-1a</u>. Aircraft needed for wildland fire incidents may be ordered through established dispatch channels. Rental aircraft approved for use can be located on the AM Source List at: http://amd.nbc.gov/fc/ara_order.htm.

Each request requires approval/signature by one level above the requestor and will normally be submitted at least 3 days prior to flight to the local BLM Aviation Manager or Dispatch. The SLFO Aviation Manager may allow requests to be submitted with shorter notice than 3 days under rare and unforeseen extenuating circumstances.

- **A.** Administrative Flights. All non-emergency flights require a cost analysis be performed to determine the most cost-effective aircraft, vendor, and itinerary. In addition, if an employee at or above the GS-15 wage level, their family members, and any non-federal passengers wish to travel on an agency-procured (charter) aircraft, prior approval is required by the Solicitors Office. This requirement is outlined in OMB Circular A-126 and is satisfied by completion of the Travel Cost Analysis, OAS-110. This does not apply to "required use" travel or "mission.
- **B.** Special Use Flights. All non-emergency Special Use (see 351 DM 1.7 and AM OPM 07-29 for definitions and examples of Special Use activities) flights require the development of a Project Aviation Safety Plan and prior Field Office Manager or State Director approval.

Emergency and special operations law enforcement flights are the only exception to prior approval. A Field Manager or the State Director must be prepared to justify, approve, and assume responsibility for any emergency. Special Use Flights, other than fire suppression, that proceed without a normal, documented Special Use Safety Plan, or when there are any other deviations from established Bureau or DOI policies and procedures associated with that flight shall be terminated immediately.

3.8 Billing Procedures

Aircraft approved by the AM for BLM aviation missions can be found on the <u>AM Source List</u>. Aircraft must be on this list in order to ensure proper payment via the <u>OAS-23</u>. The <u>OAS-23</u> will be used for all DOI-AM rental and contract aircraft. The Flight Manager or other designated Bureau representative must ensure that the line entries are completed at the conclusion of each flight and initial each line item in the right-hand column ("Signed Received"). For contracted aircraft, the <u>OAS-23</u> will be submitted (at least every 2 weeks to the Field Office Aviation Manager for review and final signature. The Field Office Aviation Manager will mail the original copy to AM. The <u>OAS-23</u> will be distributed accordingly:

- **A.** White copy to the Unit Aviation Manager (UAM will forward to AM)
- **B.** Blue copy retained by the vendor.
- **C.** Yellow copy retained by the contract Aircraft Manager.
- **D.** Photo copies retained by the Unit Aviation Manager.

4.0 AVIATION OPERATIONS

All aviation operations will be conducted in accordance with <u>DM 350-354</u>, AM Handbooks, <u>BLM 9400 Manual</u> and agency approved Operational Guides. Required elements of a Project Aviation Safety Plan can be found in the <u>National Aviation Plan</u>.

4.1 General Use Flights

Point-to-Point flights (from one designated airport to another designated airport with no mission type work enroute) requirements:

- **A.** Approved <u>9400-1a</u> Aircraft Flight Request/Flight Schedule.
- **B.** Only DOI-AM carded/approved aircraft and pilots may be utilized.
- C. Passengers will be manifested and briefed on safety procedures
- **D.** FAA VFR/IFR or Agency flight plan, flight following/ resource tracking
- E. Qualified Flight Manager assigned
- **F.** Only mission essential passengers allowed on board.

4.2 Special-Use (Mission) Flights

Special-use flights are defined as all flights other than point-to-point flights. The purpose of these flights is to accomplish any resource management-related task (i.e. aerial survey or observation) which requires special techniques, procedures and considerations (See 351 DM 1.7, OPM 07-29, BLM National Aviation Plan; chapter 6). Special pilot qualifications and techniques, special aircraft equipment, and personal protective equipment are required to minimize risk to personnel and property. DOI/USFS aircraft utilized for special-use missions must have a current Aircraft Data Card onboard issued by Aviation Management Directorate (AMD) or USFS. This card certifies that the aircraft has been inspected and approved by either Aviation Management Directorate (AMD), or USFS, and meet all FAA and agency equipment and maintenance requirements. Approvals for the specific intended mission must be indicated on the card. If the aircraft does not have a card, the card has expired, or is not approved for the intended mission **no flight will occur**.

These activities include:

- Low level flight (within 500' of the surface)
- Resource reconnaissance
- Air tactical group supervision
- Cargo letdown
- External load ≤50' (helicopter)
- External load >50' (helicopter) Short-haul
- Wheel operations on unprepared landing areas
- Offshore platform landings
- Animal eradication
- Airframe mounted net gun (helicopter)
- Aerial ignition
- Smoke jumping/para-cargo

- Mountain flying
- Fire reconnaissance
- Toe-in, single-skid
- Rappel
- Water landings floats or hull
- Animal darting, paint ball

- Animal gathering and capture
- Handheld net gun
- Night vision goggles
- Water/retardant application

Note: OPM 07-29 introduces an additional category of flight ("High Reconnaissance") that lies somewhere between "Point-to Point" and "Special Use," which is based on subtle differences in how an aircraft is maneuvered. To conform to Chapter 6 of the National Aviation Plan, Utah BLM will categorize all flights into only two categories: General Use (also called: "Point to Point" in some National Publications) and Special Use. Essentially, all fixed-wing reconnaissance work performed above 500 ft. AGL is either "Fire Reconnaissance," "Resource Reconnaissance," or Precision Reconnaissance" as defined in OPM 07-29, and will be managed accordingly as Special Use.

All special-use flights are inherently higher risk and require the following procedures:

- **A.** Aircraft and pilots must be approved for specific special-use missions.
- **B.** On all helicopter flights, the pilot and each aircrew member are required to wear the following Personal Protective Equipment (PPE): nomex or equivalent clothing, leather boots, nomex /leather gloves, and aviator's protective helmet (SPH-4/5 or equivalent). There a few exceptions to PPE requirements which are identified in DM 351-1.7B and in the DOI AM Aviation Life Support Equipment (ALSE) Handbook.
- **C.** Personnel/passengers operationally involved in Special Use missions must be trained and qualified to perform the intended activities.
- **D.** Agency flight following with 15-minute radio check-in intervals giving current location by coordinates or landmark, heading, intentions.
- **E.** A <u>Project Aviation Safety Plan</u> will be developed to identify hazards and mitigate risk. The Unit Aviation Manager and Field Manager will sign and approve each plan.
- **F.** Very complex, high-risk Project Aviation Safety Plans require the added approval of the State Aviation Manager, the State Director, and/or higher level approval. (For example, WH&B census missions and most wildland fire tactical missions are approved at the national level via comprehensive, published operating plans.)

Note: The primary purpose of a Project Aviation Safety Plan<u>is</u> to ensure that an appropriate risk assessment is performed to enhance the safety of the flight, to ensure that the mission is thoroughly described and justified, and to ensure that managers and supervisors understand their accountability for the safety of Bureau employees

involved in Special Use flights. The Plan further serves as a thorough briefing document for managers, supervisors, dispatchers, pilots, and Aircrew members.

For a recurring Special Use mission that will be flown repeatedly throughout the year (i.e. a wildlife survey flown once each month with an identical route and flight profile) one single Special Use Plan may be written and approved for that mission for the entire field season. A 9400-1a Flight Request will then be submitted for each individual occurrence of that Special Use flight. The Project Aviation Safety Plan should be reviewed before each flight and modified/resubmitted for approval, if necessary, whenever there is a significant change in the plan, such as a new flight route or area, new or additional personnel involved in the flight, or additions or changes to the specific nature of the flight profile or work being performed by Bureau employees on that flight.

Each Project Aviation Safety Plan will include the following elements:

- (1) A thorough description of the flight or project, including aircraft make and model, and a documented justification about why the mission cannot be accomplished on the ground. The Unit Aviation Manager will assist with the selection of an aircraft with the appropriate capability to perform the desired mission, and verify that the pilot and aircraft are both currently carded for the type of mission to be flown.
- (2) A description of the flight area including the type of terrain, expected temperatures, and the minimum and maximum elevations of flight to ensure proper performance planning in conjunction with #1 above.
- (3) All Special Use Aircrew Members, their flight weights, and the weight of any cargo will be listed on the plan and pre-approved. The Unit Aviation Manager will verify that each crewmember has received the appropriate required training and/or refresher training within the timeframe specified in OPM 07-04. Non-essential/unauthorized passengers are not allowed. Any hazardous materials which may be carried on the mission must be identified both in the plan and shown to the pilot during the preflight briefing. (Requirements in Sec. 4.8 below will be strictly adhered to.)
- (4) The procedures and frequencies to be utilized for flight following must be identified, along with any personnel who may be utilized for local on-scene flight following. (See Sec. 4.4.E below for details.)
- (5) Identification and analysis of both aerial and ground hazards associated with the flight, including a hazard map of the flight route/area, which will be reviewed by the pilot and Flight Manager prior to the flight, and provided to the Aircraft Dispatcher. The hazard analysis must include the measures that are planned to mitigate the identified hazards. (A BLM Risk Management Worksheet along with a Hazard Abatement Plan may be utilized and included to document this process.) Mitigation measures that involve the deconfliction of Military Special Use Airspace (SUAs), Military Operating Areas (MOAs) and Restricted Areas (RAs) and Military Training Routes (MTRs) will

- require a qualified Aircraft Dispatcher to coordinate the flight with the appropriate military schedulers.
- (6) Any Personal Protective Equipment or other special items required for the flight must be identified and reviewed/inspected during the preflight briefing.
- (7) A contingency plan of action to follow in the event of an accident or incident must be pre-identified. In most instances, this will involve the Aircraft Dispatcher implementing and following the procedures outlined in the Northern Utah Interagency Aviation Mishap Response Plan.
- (8) Approval signatures by the SAM, UAM and Field Manager.

4.3 Flight Following

According to policy, "Flight following is the responsibility of the scheduling office until the flight is terminated or transferred through positive and documented hand-off to an en-route or receiving office." In practice, Flight following is ultimately a shared responsibility between the pilot, the Flight Manager on board the aircraft (or project helibase/helispot manager or designated ABRO) and the Aircraft Dispatcher. Flight following procedures, check-ins and actions will be documented on 9400-1a blocks 4 & 5, Resource Orders, Radio Logs or other records. The Pilot-In-Command (PIC) is responsible for executing all FAA flight plans, flying the aircraft and passenger safety. Deviations from flight plans are allowed only for weather or safety related reasons; the FAA or agency will be informed at the time of deviation.

Note: As per DM 351-1.4C, Bureau personnel tasked with flight following responsibility must monitor the communications radio at all times during the flight and must have received training concerning actions to take in the event of an overdue aircraft, aircraft mishap, etc.

All BLM flights will be flight followed utilizing one or more of the methods listed below.

- **A.** An Instrument Flight Rules (IFR) flight plan filed with FAA, executed with radar and/or radio transmissions with an FAA facility (point to point).
- **B.** A Visual Flight Rules (VFR) flight plan filed with FAA, executed with radio and/or telephone check-ins to an FAA facility (point to point).
- **C.** A written agency flight plan utilizing radio check-ins with Dispatch offices at 15-minute intervals. Each check-in will state current position, heading and intentions. When flying into known radio "dead spots," Dispatch will be informed of location and given an estimated time the aircraft will be out of contact. Actions to be taken to mitigate the risk of working in known radio "dead spots" should be addressed in the Project Aviation Safety Plan. The aircraft will resume radio contact with Dispatch as soon as possible.

- **D.** Automatic Flight Following is authorized. However, adherence to <u>guidelines and procedures</u> identified in the National Interagency Mobilization Guide regarding AFF is mandatory.
- **E.** Local/on-scene flight following by incident or project personnel may be implemented and utilized only when and if all of the following requirements are met and in place:
 - (1) Personnel involved in local flight following must be properly trained and qualified. As a minimum they must have completed the <u>B-3</u> Basic Aviation Safety training (or the equivalent IAT A-modules as a refresher) within the past 3 years. On wildland fire incidents, local flight following may be performed by qualified red-carded personnel, preferably RADO or ABRO carded individuals. Aircraft vendor or Contractor employees may not be tasked with local flight following for liability reasons.
 - (2) Local flight following may be conducted at a location where there is positive communication that is tested and established with an agency or interagency dispatch center, either by radio or telephone, so that an appropriate emergency response may be activated in the event of a mishap. If an individual tasked with local flight following cannot establish or maintain a positive communication link with Dispatch, the mission must be immediately aborted, or an alternative implemented (such as a human repeater) before the mission proceeds. If flight following with dispatch is utilized during a ferry flight between an aircraft base of operations and a project site (where local flight following will occur), a positive hand-off must occur between dispatch and the project (or incident) each time local, on-scene flight following commences or is terminated.
 - (3) When planning non-emergency resource missions, the use of local qualified personnel for on-scene flight following must be written and approved in the <u>Project Aviation</u> <u>Safety Plan</u>. In wildland fire operations, the use of local flight following by on-scene personnel is a standard procedure that is approved in national and local fire operations plans and guidelines.

Any flight will be terminated at the earliest opportunity that does not have positive radio contact (Special Use or mission flights) unless those circumstances have been addressed (known radio "dead spots") and mitigated/approved in the Project Aviation Safety Plan.

4.4 Law Enforcement Operations

BLM Law Enforcement personnel often operate/cooperate with other agencies in their mission. This sometimes involves the use of State, local, military and other federal aircraft. The nature of law enforcement activities requires some deviations from normal BLM aviation policy. These operations are authorized and outlined in written Memorandum of Understanding (MOU) between the cooperating agencies. Aviation Managers at the state office and field office will be notified/consulted prior to any law enforcement aviation activity. The Interagency Helicopter Operations Guide (Chapter 16) provides specific direction for law enforcement activities when using helicopters. There is currently no provision in the SLFO exclusive-use fire helicopter contract that allows for law enforcement flights. Therefore, unless

under extreme circumstances, SLFO employees involved in such activities may be limited to using cooperator aircraft or appropriately carded CWN or rental aircraft.

4.5 Air Tactical Supervision

BLM air tactical supervision includes missions performed by an Air Tactical Group Supervisor and missions performed by an Aerial Supervision Module (see <u>Aerial Supervision Module</u> <u>Operations Guide</u> for definitions). Air Tactical Supervision operations will be guided by the <u>Interagency Standards for Fire and Fire Aviation Operations, Chapter 17</u> (Red Book) and by the <u>Interagency Air Tactical Group Supervisor's Guide</u>, which is BLM policy.

4.6 Operational Procedures

All aircraft operations will be carried out in accordance with Department, Bureau and FAA regulations. All employees involved in aircraft operations will be trained and fully qualified in their assigned position, as defined in OPM 07-04 and the BLM National Aviation Plan, Chapter 4. The following handbooks and guides offer preferred technical and operational procedures that should be reviewed and utilized prior to a specific aviation operation or project.

A. DOI-AM Handbooks

Aviation Life Support Equipment (ALSE), 351 DM 1

Aviation Mishap Notification/Investigation/Reporting, 352 DM 6

Aviation Fuel Handling, 351 DM 1

Aviation Transport of Hazardous Materials, 351 DM 1

Heliport Installation, <u>351 DM 1</u>

Airfreight/Para-cargo, 351 DM 1

Animal Gathering and Capturing, 351 DM 1

Animal Eradication and Tagging, 351 DM 1

B. BLM Operational Guides

Wild Horse and Burro Aviation Management Handbook

C. Interagency Operational Guides

Standards for Fire and Fire Aviation Operations

Airtanker Base Operations Guide

Aerial Ignition Guide

Helicopter Rappel Guide

Interagency Helicopter Operations Guide (IHOG)

Air Tactical Group Supervisor's Guide

Lead plane Operations Guide

Interagency Single Engine Airtanker Operations Guide (ISOG)

Airspace Coordination Guide

Military Use Handbook (Chapter 70)

Interagency Transport of Hazardous Materials

4.7 Exemptions/Waivers

Any exemptions or waivers from FAA, DOI, DOT or BLM aviation policy must be justified, requested and approved through the BLM National Aviation Office.

A. <u>Transport of Hazardous Materials</u>. DOI has been granted exemption by Department of Transportation for the transport of certain hazardous materials aboard aircraft. The <u>Interagency Aviation Transport of Hazardous Materials Handbook/Guide</u> and the <u>DOT letter of exemption</u> must be carried onboard all DOI or USFS contracted or procured aircraft that are engaged in the transport of hazardous materials.

5.0 AVIATION SAFETY AND ACCIDENT PREVENTION

5.1 Pilot

A. Qualifications. Only well trained, experienced and FAA certified pilots will be utilized in BLM Aviation activities. All pilots flying DOI-owned, leased, contracted, rented (ARA) or Cooperator aircraft will meet requirements set forth in 351 DM 3. Prior to flight a current AM or Interagency Pilot Qualification Card or AM Letter of Approval (LOA) shall be displayed indicating that the pilot is certified to fly the particular aircraft and is qualified to perform the specific mission at hand.

If a pilot's card is not current or signed off for the specified mission, the flight will not be authorized until the local Aviation Manager is notified and the situation remedied.

- **B.** Flight and Duty Limitations. Pilot flight time and duty time limitations are outlined in 351 DM 1.9B. Daily and cumulative flight and duty hours will be monitored, tracked and documented on all DOI fleet, contract and rental pilots. Aircraft Managers, Pilots and/or Dispatchers will maintain flight and duty logs. SAFECOM reports will be completed and forwarded on all flight and duty infractions. During periods of prolonged heavy aircraft use (intense fire activity) flight and duty time may be further limited at management discretion.
- **C.** Comfort/Rest. Every effort will be made to ensure that pilots on extended standby or prolonged, extensive flying periods are provided comfortable areas to rest/take breaks/work. This includes adequate shade/air conditioning/heat, toilet facilities, food and water and an atmosphere free of undue noise, activity and stress.
- **D.** Sterile Cockpit. "Limiting communications and actions within the cockpit to only those required for safe maneuvering and traffic separation". This means communications with Dispatch, ground personnel and other aircraft concerning *mission* information is prohibited. Pilots will be afforded the opportunity to maneuver the aircraft safely at all times without undue physical or mental interference. This is especially important during approach/departure and takeoff/ landings. Sterile cockpit procedures should also be followed when air tankers are on final approach, helicopters coming out of or going into dip-sites and when aircraft are inserting rappellers or smokejumpers.

A sterile cockpit will be maintained within a minimum 5-mile radius of any controlled and uncontrolled airport, to include the designated airspace around any uncontrolled Helibase, Helispot, SEAT base and remote airstrips. Aircraft should notify Dispatch when they are within the 5 mile limit and are moving to a sterile cockpit operation mode.

E. <u>Transponder Code.</u> All aircraft engaged in tactical fire suppression operations will utilize transponder code 1255 unless otherwise directed by an Air Traffic Controller (ATC). This code is not to be used when repositioning or during cross-country flights.

- **F.** <u>Airspace Coordination.</u> All SLFO Aviation Operations will comply with the regulations and guidelines in the Interagency Airspace Coordination Guide.
 - (1) <u>Aviation Project Deconfliction.</u> Military Airspace Coordination is a critical safety issue that must be considered before and during most flight operations in northwestern Utah. The project flight manager or chief of party is responsible for working with agency dispatchers who routinely de-conflict military airspace with the Utah Test and Training Range (UTTR) via Clover Control located at Hill Air Force Base. Non-emergency, resource type flights require a minimum of two week's prior notice to NUIFC in order for this process to occur. Military controllers, agency dispatchers, and the field office aviation manager are under no obligation to approve non-emergency flight requests that do not provide adequate prior notice.
 - (2) <u>Temporary Flight Restriction.</u> During such emergencies as a wild fire, the BLM is authorized to request and implement a <u>Temporary Flight Restriction (TFR)</u> from the FAA under <u>FAR Part 91.137</u>, if conditions warrant. If imposed by the BLM, a TFR will be released or lifted at the earliest possible time (as an incident is "winding down") in order to maintain effective working relations with the FAA and US Air Force. It will be the Incident Commander's responsibility to request termination of the TFR through the NUIFC or the Unit Aviation Manager. During periods of extreme activity, such as multiple Type 1, 2, or 3 fires, an Airspace Coordinator may be ordered by dispatch to assist with this process.
 - (3) <u>Dispatch Boundary Zone</u>. The definition of Boundary Zone area for the purposes of conflicting airspace shall be defined as an area five nautical miles on either side of the dispatch center jurisdictional boundaries as per the <u>Great Basin Mobilization Guide</u> (<u>Chapter 20 Administrative Procedures</u>). Aircraft rely upon dispatch centers for current relevant information. Therefore, coordination between dispatch centers must occur <u>prior to dispatch.</u> Prior to dispatching aircraft to a boundary zone area, the <u>Aviation Boundary Operations Checklist</u> must be completed. Agency aircraft working within the Boundary Zone will be assigned a common air-to-air (VHF-AM), air-to-ground (VHF-FM), and flight-following frequency for each incident within the boundary corridor <u>prior to dispatch</u>. Adjacent dispatch centers will be notified of fire detection and reconnaissance flights within the Boundary Zone assuring that deconfliction has occurred with other known agency/cooperator aircraft
- **G.** <u>Aircraft Certification</u>. Only aircraft properly equipped, well maintained and FAA/DOI certified will be utilized for BLM aviation missions. All DOI owned, leased, contracted or rented aircraft will be inspected and certified for intended missions under the appropriate CFR/FAR as outlined in 350-354 DM (this includes flights on Cooperator Aircraft).
 - (1) <u>ARA Point-to-Point/High Recon Flights</u>: Vendor procured and operated Aircraft Rental Agreement (ARA) conducting only direct flights between airports carrying DOI passengers and/or cargo or conducting high-level reconnaissance (above 500' AGL). The FAA has primary responsibility for inspection of these aircraft and technical oversight of the vendor for compliance under CFR Part 135. A <u>written notice</u> issued by

AM will be carried aboard the aircraft indicating that the vendor has a current and approved ARA. Although DOI has not inspected the aircraft, the notice verifies that the vendor is certified under Part 135. Aircraft without a current AMD notice should not be utilized.

(2) <u>Special Use Flights</u>. DOI aircraft other than described in A above must have a current <u>Aircraft Data Card</u> on board issued by AMD or USFS. This card certifies that the aircraft has been inspected and approved by either AMD or USFS and meets all FAA and agency equipment and maintenance requirements. If the aircraft doesn't have a card, the card has expired or is not approved for the intended mission no flight will occur.

5.2 Mission Planning

All flights will receive a level of planning and risk management commensurate with the complexity and risks involved with the proposed mission. The goal is to reduce personal exposure, reduce/mitigate risks and prevent accidents/incidents. The following are required:

A. All Flights.

- (1) Only essential flights and passengers approved
- (2) Approved pilots and aircraft
- (3) Flight Plans/Flight Following
- (4) Pre-flight Inspection/Weight & Balance/Load Calc completed
- (5) Mission briefing to pilot and passengers
- (6) Passengers manifested/briefed on aircraft safety
- (7) Safety equipment available and utilized
- (8) Hazard analysis/mitigation performed
- **B.** Special Use Flights. (In addition to above)
 - (1) Project Aviation Safety Plan Prepared
 - (2) PPE used by pilot and passengers for all helicopter flights and otherwise as needed for fixed wing missions (i.e. tactical fire)
 - (3) Hazard map developed, reviewed, and updated as needed
 - (4) Airspace de-confliction performed, as needed

5.3 Environmental Factors

- **A.** <u>Daylight</u>. All DOI aircraft (except aircraft certified for IFR and with IFR rated_pilots) are limited to flight during the following time period: 30 minutes prior to_official sunrise until 30 minutes after official sunset.
- **B.** <u>Wind</u>. Helicopter operations will cease whenever wind exceeds limitations in the aircraft Operators Flight Manual or the IHOG (which ever is the lowest). If no limitations are prescribed in the Flight Manual, the following limitations apply:
 - (1) Low-Level (below 500' AGL):
 - (a) Type III 30 knots or max gust spread of 15 knots
 - **(b)** Type I & II 40 knots or max gust spread of 15 knots
 - (2) <u>High-Level</u> (above 500' AGL):
 - (a) All types 50 knot winds

Fixed-wing operations will monitor and confer with pilot in command to ensure that winds do not exceed capabilities of the aircraft or pilot.

C. <u>Weather/Visibility</u>. The pilot must evaluate known and predicted weather_conditions prior to flight, avoid thunderstorms and cancel, postpone or_terminate flights when weather or visibility conditions is warranted.

5.4 Aviation Incident/Accident Response Plans

The <u>Northern Utah Interagency Aviation Mishap Response Plan</u> includes clear procedures to follow before and after aircraft accidents occur, procedures for overdue and missing aircraft, and a comprehensive list of necessary local, state and national emergency contacts and agency aviation safety contacts.

5.5 Overdue/Missing Aircraft

Aggressive attempts to contact/track aircraft that are overdue for radio and telephone check-ins or arrivals will be made by Dispatch offices. An aircraft is considered "overdue" if has not been contacted or located within 30 minutes of the last radio transmission/position report. When the known fuel duration on board an overdue aircraft has been exceeded, and its status and location has not been determined, it is then considered "missing." Dispatch will initiate the appropriate search and rescue actions according to procedures outlined in the Northern Utah Interagency Aviation Mishap Response Plan.

5.6 Mishap Reporting

All aviation mishaps, hazards, maintenance deficiency, incidents or accidents will be reported according to 352 DM 1 & 6 and the AM Aviation Mishap Notification/Investigation/Reporting Handbook (OPM-06-52).

A. <u>Aircraft Accidents</u> will be reported immediately to National Transportation and Safety Board (NTSB) and DOI-AM. Make required agency notifications outlined in the <u>Northern</u>

<u>Utah Interagency Aviation Mishap Response Plan</u>. NTSB and DOI-AM will conduct joint investigation/follow-up.

B. <u>Aircraft Incidents and Incidents with Potential.</u> All mishaps/hazards other than those described above. Document incident on a <u>SAFECOM</u> (<u>OAS-34/FS-5700-14</u>). The interagency web site is: http://www.safecom.gov/

Send copies to the Unit Aviation Manager, AM Safety and the State Aviation Manager.

Follow-up/investigation by the Unit Aviation Manager is mandatory. Follow-up by State Aviation Manager may be requested.

5.7 Aviation Training and Qualifications

All personnel (BLM or cooperator) engaged in aviation activities, from passengers to upper management, will meet training, currency and experience requirements commensurate with their assigned aviation responsibilities. (See OPM 07-04, NWCG 310-1, BLM National Aviation Plan, and/or the applicable interagency aviation guide.)

- **A.** <u>Instruction.</u> Aviation training will only be conducted by approved Interagency Aviation Trainers, DOI-AM Training Specialists or other approved aviation instructors. Basic and 200 Level aviation courses may be coordinated and presented at the field level. The 300 level and higher aviation courses will be requested through the State Office, DOI-AM or NIFC.
- **B.** <u>Documentation</u>. All aviation training sessions presented at the local level will be documented on <u>OAS-106</u> or similar form and retained in local files. Individual employee training, qualification and experience records will be updated annually, authorized by the Unit Aviation Manager, retained in local files and entered in the <u>Incident Qualification and Certification System</u>.

5.8 Aviation Reviews

The Field Office Aviation Program will be reviewed/inspected at least once every 2 years by the State Aviation Manager or national/regional review teams. Facilities, staffing, aircraft dispatching, administrative and operational procedures will be analyzed for compliance with regulations and safety enhancement. Findings and recommendations will be reported to the Field Office Manager within 3 months of review.

6.0 AVIATION FACILITIES

6.1 Operational Bases

Heliports, retardant bases, and airport facilities that are used on a continuous or seasonal basis are considered operational bases. This includes aviation facilities on BLM land and facilities on non-BLM land where BLM has primary responsibility for operations, maintenance and oversight.

- **A.** Construction and Maintenance. The size and extent of aviation installations will be commensurate with expected aircraft use at any given site. Design criteria will provide for operational safety as well as an adequate work, rest, and comfort environment for pilots, aircrew members and other assigned personnel. Facilities will be constructed and maintained according to <u>BLM Manual 9400</u> and 9111. Field Offices are responsible for purchase/lease, construction, maintenance and utilities relating to aviation facilities.
- **B.** Safety. Aviation facilities must comply with safety regulations outlined in Department/Bureau manuals, guides and handbooks as well as the Occupational Safety and Health Act (OSHA). Buildings, equipment, utilities and landing surfaces will be inspected by the Field Office Aviation Manager annually to identify maintenance or safety deficiencies. Modifications and repairs will be made prior to the operational season. The State Aviation Manager will inspect aviation facilities at least once every two years.

6.2 Temporary Bases

Temporary bases include helispots and remote airstrips used on a temporary or intermittent basis. If not on BLM land, these sites must be pre-approved for use (such as a Facilities and Land Use Agreement if payments will be made). Each site should be cataloged as to location, description, local hazards, use procedures, agreements, contacts, etc. Inspections and maintenance work are to be performed by Bureau personnel or agency contractors to meet safety standards as needed. Upon termination of use, the BLM is responsible for the rehabilitation of any impacted land and resources.

7.0 AVIATION ADMINISTRATION

7.1 Aviation References

The Unit Aviation Manager and Northern Utah Interagency Fire Center (NUIFC) will maintain a current aviation reference library. At a minimum, each will have:

Departmental Manual, Parts 112, 350-354

AM Operational Procedures Memoranda (OPM's)

BLM Manual Sections 9111, 9400-9470

<u>Title 14 CFR, Federal Aviation Regulations</u>

OMB Circulars <u>A-76</u>, <u>A-123</u>, <u>A-126</u>

GSA FPMR 101-37

AMD, Bureau and Interagency Operational Guides

Unit Aviation Management/Operations Plans

State Aviation Management Plan

Aviation Training Materials

Aircraft Identification/Performance Publications

Aviation Technical Assistance Directory

CWN Helicopter/Air tanker/Retardant Contracts

AP/1A and AP/1B with western charts

AMD Source List

Unit Aviation Incident/Accident Response Plan

NOAA Sectional Charts

Unit Aerial Hazard Map

7.2 Aviation Documentation

Aviation documentation requirements are described in the <u>National Aviation Plan</u> <u>Documentation Matrix</u>. The importance of accurate, comprehensive flight and administrative records cannot be overemphasized.

All documentation should be retained locally for at least 3 years.

A. Typical files should include:

General Use Flights

SES Flights

Special Use Flights

Contract/ERA Administration Files

Aviation Training and Qualification Records

Aviation Statistical Records

Local Aerial Hazard/Helispot/Airstrip Database

Aviation Incident/Accident Files

Aviation Memo/Bulletin/Alert File

Assortment of Aviation Forms (AM, BLM, etc.)

Aviation Contact List

Position	Name	Office	Cellular
State Aviation Manager	John Burke	801-539-4241	801-550-9857
Assistant State Aviation Manager	Nic Strohomeyer	801-539-4296	801-673-6057
Unit Aviation Manager / FMO	Jeff Kline	801-977-4316	801-541-4020
Assistant Fire Management Officer	Darron Williams	801-977-4381	801-541-0828
Helicopter Manager	John Softich	801-977-4336	801-232-4259
Assistant Helicopter Manager	Patrick Kenny	801-977-4363	801-541-5637
NUIFC Manager	Wanda Grey	801-908-1900	801-541-6880
Assistant NUIFC Manager	Jana Barabochkine	801-908-1900	801-557-5541
Assistant NUIFC Manager	Gerri Waters	801-977-1900	

Utah BLM Project Aviation Safety Plan

Project Name:			
Objective:			
Justification:			
Project Date(s):			
Location:			
Projected Cost of Aviation Resou	rces:		
Cost Analysis/Estimate:			
Ferry Time		\$	
Flight Time		\$	
Service Truck Mileage		\$	
Per diem & misc. charges		\$	
Total		\$	
Cost Coding: Aircraft:			
Pilot(s):			
Participants:			
Flight Following/Search and Rescue:			

Name	Use	Rx frequency	Tx frequency	Tone
Command	Primary flight			
	following			
National Flight	Secondary flight	168.650	168.650	
Following	following			
Deck	Ground operations			
Air 1	Air to ground			
Air 2	Air to Air			

Aerial	Hazard	Analysis:

Airspace Coordination:

Personal Protective Equipment:

Load Calculations and Weight and Balance:

Unimproved Landing Sites:

Standard Operating Procedures:

Pre-Work Meeting and Operational Safety Briefing:

Signatures:		
Prepared by:	Project Manager	Date:
Reviewed by:	Unit Aviation Manager	Date:
Reviewed by:	State Aviation Manager	Date:
Approved by:	Field Office Manager	Date: